

### **REMARKS**

Claim 1 has been amended to correct a typographical error. The plasmid "pLAFRI" has been corrected to recite "pLAFR1." Support for this amendment is found in the specification at, for example, page 3, lines 1-6.

It is submitted that no new matter has been introduced by the foregoing amendment. Approval and entry of the amendment is respectfully solicited.

#### **§112, First Paragraph Rejection:**

##### **Enablement**

Claims 1, 3, 6, and 8 have been rejected solely under 35 U.S.C. §112, first paragraph, for lack of enablement. (Paper No. 20070607 at 2). In making the rejection, the Examiner asserted that "the processes used to make *Sinorhizobium meliloti* IFO 14782/pVK601 and *Sinorhizobium meliloti* PY-C341K1 using plasmids pVK100, pRK290, pLAFR1, and/or RSF1010 do not appear to be repeatable." (*Id.* at 3). The Examiner further asserted that "[a]n enabling deposit of *Sinorhizobium meliloti* IFO 14782/pVK601 and *Sinorhizobium meliloti* PY-C341K1 and plasmids pVK100, pRK290, and pLAFR1 may overcome the rejection." (*Id.*).

Initially, we note that plasmids pVK100<sup>1</sup>, pRK290, pLAFR1, and RSF1010 are well known in the art. Plasmids pVK100, pRK290, pLAFR1, and RSF1010 are commercially available and can each be purchased from Deutsche Sammlung von Mikroorganismen und Zeilkulturen GmbH (DSMZ) in Gottingen, Germany. Attached as Exhibit 1 for the Examiner's convenience is a printout from the Internet demonstrating

---

<sup>1</sup> We note that an internet printout demonstrating that plasmid pVK100 is readily available was already submitted in our previous Response filed March 15, 2007; however, for the Examiner's convenience, another copy is enclosed as Exhibit 1.

that plasmids pVK100, pRK290, pLAFR1, and RSF1010 are well known and readily available.

With respect to *Sinorhizobium meliloti* IFO 14782/pVK601 and *Sinorhizobium meliloti* PY-C341K1, we note that these materials are being deposited in accordance with the Budapest Treaty. The following statements regarding these respective deposits are provided upon information and belief:

During the pendency of this application, access to the deposits will be afforded to the Commissioner upon request.

All restrictions imposed by the depositor on the availability to the public of the above-referenced deposited material will be irrevocably removed upon the granting of a patent.

The deposits will be maintained in a public repository for a period of 30 years or 5 years after the last request or for the effective life of the patent, whichever is longer.

The deposits will be replaced if they should ever become inviable.

Although not necessary to comply with §112, first paragraph, it is respectfully submitted that the application fully complies with the deposit requirements as set forth in 37 CFR § 1.808. Therefore, the rejection has been rendered moot and should be withdrawn.

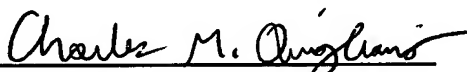
Application No.: 10/528,892  
Amendment Dated: September 13, 2007  
Reply to Office Action Dated: June 18, 2007

Accordingly, for the reasons set forth above, entry of the amendment, withdrawal of the rejection, and allowance of the claims are respectfully requested. If the Examiner has any questions regarding this paper, please contact the undersigned.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on September 13, 2007.

  
Charles M. Avigiliano, Reg. No. 52,578

Respectfully submitted,

By:   
Charles M. Avigiliano  
Registration No. 52,578  
BRYAN CAVE LLP  
1290 Avenue of the Americas  
33<sup>rd</sup> Floor  
New York, NY 10104-3300  
Phone: (212) 541-2000  
Fax: (212) 541-4630



Identification

Patent and Safe Deposit

Microorganisms

Plant-Viruses

Plant Cell Lines

Human and Animal Cell Lines

Search

Advanced Search

- » Head of Department
- » Staff
- » Publications
- » Catalogue
- » Prices
- » Ordering Procedure
- » Conditions of Delivery
- » Technical Information
- » Deposit
- » Special Services
- » Safety Instructions
- » Bacterial Nomenclature

Plasmid pVK100

Name	pVK100
DSM No.	7141
Other Collection No.	ATCC 37156, K12 HB101
History	<- ATCC <- E. Nester, Washington
Mol. Weight	23.00 kb
Marker	Km <sup>r</sup> , Tc <sup>r</sup>
Remarks	A cosmid broad host range cloning vector. Mobilization by the helper plasmid pRK2013. Construction: pRK290 and pHK17 cos site. Cloning sites: <i>EcoRI</i> , <i>SalI</i> , <i>HindIII</i> , <i>XhoI</i> .
Distributed in	<i>Escherichia coli</i> K12 HB101
Medium	381, 37°C
Reference	6295
Price	EURO 38 (non-profit making institutions), EURO 54 (other institutions): Normal price.
Restriction	Genetically engineered microorganism(C)

Back

Imprint  
Conditions

© 2004 DSMZ GmbH  
All rights reserved

Annick II

PVK100.SEQ



Return to this vector's summary.

ID PVK100 preliminary; circular DNA; SYN; 23000 BP.  
 XX  
 AC ATCC37156;  
 XX  
 DT 01-JUL-1993 (Rel. 7, Created)  
 DT 01-JUL-1995 (Rel. 12, Last updated, Version 1)  
 XX  
 DE Broad host range/E.coli cosmid vector pVK100 - incomplete.  
 XX  
 KW cloning vector.  
 XX  
 OS Cloning vector  
 OC Artificial sequences; Cloning vehicles.  
 XX  
 RN [1]  
 RC pVK100 from pRK290 & pHK17  
 RC pVK101 from pVK100  
 RC pVK102 from pVK100  
 RC pVK200 series from pVK102 & pTiA6  
 RC pVK261 from pVK102 & pTiA6  
 RA Knauf V.C., Nester E.W.;  
 RT "Wide host range cloning vectors: a cosmid clone bank of an  
 RT Agrobacterium Ti plasmid";  
 RL Plasmid 8:45-54(1982).  
 XX  
 RN [2]  
 RC pHK17 from pRK2501 & pHC79  
 RC pHK111, pHK121, pHK120, pHK210 from pHK17 & pTiA6  
 RC pTiA6::Tn5 from pTiA6 & Tn5  
 RA Klee H., Gordon M.P., Nester E.W.;  
 RT "Complementation analysis of Agrobacterium tumefaciens Ti plasmid  
 RT mutations affecting oncogenicity";  
 RL J. Bacteriol. 150:327-331(1982).  
 CX  
 RN [3]  
 RC pTiB6-806 from Agrobacterium Ti octopine plasmid  
 RC pTiA6 from Agrobacterium Ti octopine plasmid  
 RC pTiACH5 from Agrobacterium Ti octopine plasmid  
 RC pTiT37 from Agrobacterium Ti nopaline plasmid  
 RC pTiC58 from Agrobacterium Ti nopaline plasmid  
 RA Nester E.W., Kosuge T.;  
 RT "Plasmids specifying plant hyperplasias";  
 RL Annu. Rev. Microbiol. 35:531-565(1981).  
 CX  
 RN [4]  
 RC from pVK102 & OpMNPV  
 RA Chen D.D., Nesson M.H., Rohrmann G.F., Beaudreau G.S.;  
 RT "The genome of the multicapsid baculovirus of Orgyia pseudosugata:  
 RT restriction map and analysis of two sets of GC-rich repeated  
 RT sequences";  
 RL J. Gen. Virol. 69:1375-1381(1988).  
 CX  
 C A cosmid, broad host range cloning vector. (ATCC staff)  
 C Mobilization by the helper plasmid pRK2013 (ATCC 37159).  
 C Medium is 1273 LB plus tetracycline.  
 C NM (pVK100)  
 C CM (no)  
 C NA (ds-DNA)  
 C TP (circular)  
 C ST ()

CC TY (cosmid)  
 CC SP (ATCC)  
 CC HO (E.coli HB101) (broad host range) (E.coli)  
 CC CP ()  
 CC FN (cloning)  
 CC SE ()  
 CC PA ()  
 CC BR ()  
 CC OF ()  
 CC OR ()

XX

Key	Location/Qualifiers
misc_feature	0..0
	/note="1. RK2, oriT/tet gene
	-> pRK248 10000bp
	1. pRK248 10000bp
	2. E. coli 1100bp, kan gene
	-> pRK2501 11100bp
	1. pRK2501 BglII 11100bp
	2. pHC79 BglII-BglIII 1719bp 2111..3830, lambda cos
	-> pHK17 12800bp
	1. RK2
	-> pRK290 20000bp
	1. pRK290 SalI-EcoRI, trfA/trfB genes
	2. pHK17 SalI-EcoRI, oriV
	-> pVK100 23000bp"
misc_binding	0..0
	/note="SIT unique EcoRI-SalI-HindIII-XhoI"
rep_origin	0..0
	/note="ORI E. coli RK2"
CDS	0..0
	/note="ANT E. coli kanamycin resistance gene (kan)"
CDS	0..0
	/note="ANT E. coli tetracycline resistance gene (tet)"

X

Q Sequence 1 BP; 0 A; 0 C; 0 G; 0 T; 1 other;

n

/



Search

Advanced Search  **Plasmid pRK290**

- » Head of Department
- » Staff
- » Publications
- » Catalogue
- » Prices
- » Ordering Procedure
- » Conditions of Delivery
- » Technical Information
- » Deposit
- » Special Services
- » Safety Instructions
- » Bacterial Nomenclature

Name	pRK290
DSM No.	3928
Other Collection No.	ATCC 37168, K12 HB101
History	< - ATCC < - D.R. Helinski
Mol. Weight	20 kb
Marker	Tc <sup>r</sup>
Remarks	Broad host range cloning vector mobilizable by pRK2013; constructed from RK2; unique restriction sites: <i>EcoRI</i> , <i>BglII</i> .
Distributed in	<i>Escherichia coli</i> K12 HB101
Medium	381, 37°C
Reference	3440
Price	EURO 38 (non-profit making institutions), EURO 54 (other institutions): Normal price.
Restriction	Genetically engineered microorganism(C)

 [Back](#)

Imprint  
Conditions

© 2004 DSMZ GmbH  
All rights reserved



Identification

Patent and Safe Deposit

Microorganisms


Plant Viruses

Plant Cell Lines

Human and Animal Cell Lines

Search

Go

- Advanced Search 
- » Head of Department

» Staff

» Publications

» Catalogue

» Prices

» Ordering Procedure

» Conditions of Delivery

» Technical Information

» Deposit

» Special Services

» Safety Instructions

» Bacterial Nomenclature

Plasmid pLAFR1

Name	pLAFR1
DSM No.	6305
Other Collection No.	ATCC 37167, K12 MM294
History	<- ATCC <- F.M. Ausubel
Mol. Weight	21.6 kb
Marker	Tc <sup>r</sup>
Remarks	Contains cos site and a relaxation complex site; a broad host range cosmid vector.
Distributed in	<i>Escherichia coli</i> K12 MM294
Medium	381, 37°C
Price	EURO 38 (non-profit making institutions), EURO 54 (other institutions): Normal price.
Restriction	Genetically engineered microorganism(C)

 Back

Imprint  
Conditions

© 2004 DSMZ GmbH  
All rights reserved



Identification

Patent and Safe Deposit

Microorganisms

Plant Viruses

Plant Cell Lines

Human and Animal Cell Lines

Search

Advanced Search

» Head of Department

» Staff

» Publications

» Catalogue

» Prices

» Ordering Procedure

» Conditions of Delivery

» Technical Information

» Deposit

» Special Services

» Safety Instructions

» Bacterial Nomenclature

Plasmid RSF1010

Name

DSM No.

Other Collection No.

History

Mol. Weight

Marker

Remarks

Distributed in

Medium

Price

Restriction

RSF1010

5401

K12 C600, NCIMB 11947

<- NCIB <- K.N. Timmis

8.9 kb

Sm<sup>r</sup>, Su<sup>r</sup>

Broad host range, high copy number plasmid used for cloning in *Pseudomonas*; unique restriction site: *EcoRI*.

*Escherichia coli* K12 C600

381, 37°C

EURO 38 (non-profit making institutions), EURO 54 (other institutions): Normal price.

Genetically engineered microorganism(C)

Imprint  
Conditions  
© 2004 DSMZ GmbH  
All rights reserved